

**REMARKS**

The Applicant respectfully requests reconsideration of the present application in view of the above changes to the claims and the following remarks, which are responsive to the Office Action mailed February 25, 2009.

**I. Objection to the Drawings**

In the Office Action, the drawings were objected to under 37 C.F.R. § 1.83(a) as not showing every feature of the invention specified in the claims. (Office Action, page 8). In particular, the Office Action states that “[t]he extraction of a geographic name from a first part of a host name and comparing it to a database must be shown or the feature(s) canceled from the claim(s).” (*Id.*). In response, Applicant respectfully asserts that each of the claimed features of the invention is, in fact, shown in the current drawings.

In particular, the features of independent Claim 57 listed in the Office Action as not being shown in the drawings (i.e., “extracting geographic naming information for the first intermediate routing device, from a first part of a host name associated with the first intermediate routing device; [and] comparing at least a part of the extracted geographic naming information for the first intermediate routing device to one or more of the plurality of variations of geographic names stored in a database containing geographic naming information”) are, in fact, part of Step 108 of Figure 2, which refers to “determine[ing the] geographic route of unknown hosts.”

Support for this interpretation of Step 108 can be found throughout the specification including, for example, Page 13, lines 15-19, which states that “[a]t 108, the system 10 takes the route to the target host 34 and analyzes and maps it geographically against a database 20 of stored locations. If any hosts leading to the target host, such as intermediate host 32, are not contained in the database 20, *the system 10 makes a determination as to the location of those hosts.*” Page 18, lines 3-11 then provides, as an example of how this determination can be made, a technique that includes “extracting geographic naming information for the first intermediate routing device, from a first part of a host name associated with the first intermediate routing

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device; [and] comparing at least a part of the extracted geographic naming information for the first intermediate routing device to one or more of the plurality of variations of geographic names stored in a database containing geographic naming information,” as recited in Applicant’s independent Claim 57. At least the combination of these portions of Applicant’s specification make clear that Step 108 of Figure 2 includes the features of Claim 57 that the Office Action states are not shown in the drawings.

In addition, Applicant respectfully asserts that, while 37 CFR 1.83(a) does require that the drawings show every feature of the invention specified in the claims, it further states that “conventional features disclosed in the description and claims, where their detailed illustration is not essential for a proper understanding of the invention, should be illustrated in the drawing in the form of a graphical drawing symbol or a labeled representation (e.g., a labeled rectangular box).” Applicant respectfully asserts that a detailed illustration of the steps of extracting geographic naming information from a first part of a host name and comparing at least part of the extracted information to variations of geographic names stored in a database is not necessary for a proper understanding of the invention. As a result, Step 108 of Figure 2 is sufficient to illustrate these features of Claim 57.

Based on the foregoing, Applicant respectfully requests that the objection to the drawings be withdrawn.

**II. Status of the Claims**

In the Office Action, Claims 57-67 were noted as pending in the application. As a result of this response, Claims 57-67 remain pending and Claim 57 has been amended in order to further clarify the claimed invention.

### **III. Claim Rejections**

#### **a. 35 U.S.C. § 103(a)**

In the Office Action, Claims 57-60, 52, 63 and 66 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,130,890 to Leinwand et al. (“*Leinwand*”) in view of U.S. Patent No. 6,249,813 to Campion et al. (“*Campion*”). (Office Action, page 2). In addition, Claims 61, 64 and 65 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Leinwand* and *Campion* and further in view of U.S. Patent No. 6,577,653 to Rochberger et al. (“*Rochberger*”). (*Id.* at page 6). Finally Claim 67 was rejected under 35 U.S.C. § 103(a) as being unpatentable over *Leinwand* in view of U.S. Patent No. 6,151,631 to Ansell et al. (“*Ansell*”). (*Id.* at page 7).

##### **i. Independent Claim 57**

As noted above, independent Claim 57 was rejected under 35 U.S.C. § 103(a) as unpatentable over *Leinwand* in view of *Campion*. Applicant respectfully asserts that neither *Leinwand* nor *Campion*, whether considered alone or in combination, teaches, suggests or renders obvious each of the recitations of independent Claim 57. In particular, neither *Leinwand* nor *Campion*, whether considered alone or in combination, teaches, suggests or renders obvious deriving a geographic location of a first intermediate routing device by “extracting geographic naming information for the first intermediate routing device, from a first part of a host name associated with the first intermediate routing device; comparing at least a part of the extracted geographic naming information for the first intermediate routing device to one or more of the plurality of variations of each of a plurality of geographic names stored in a database containing geographic naming information; and determining a geographic location of the first intermediate routing device based at least in part on the comparison,” as recited in Applicant’s independent Claim 57, as amended.

Turning first to *Leinwand*, the Office Action concedes that “*Leinwand* does not explicitly teach geographic naming information in a first part of a host name.” *Leinwand* further, therefore,

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does not teach or suggest *extracting* the geographic naming information *from the first part of the host name*, as recited in Applicant's independent Claim 57. *Leinwand* further does not teach, suggest or render obvious comparing the extracted geographic naming information "to one or more of the plurality of variations of each of a plurality of geographic names stored in a database," as further recited in Applicant's independent Claim 57, as amended. In fact, *Leinwand* does not teach or suggest a database of a plurality of variations of each of a plurality of geographic names at all.

In contrast, *Leinwand* discloses only a database that maps "AS [or autonomous system] number to country code(s) of the country or countries in which AS 12 is located" (*Leinwand*, Col. 15, lines 26-28); and both "an ARIN maintained database" (*Id.* at Col. 15, line 38) and a "RIPE database" (*Id.* at Col. 16, line 11), wherein the latter two databases can be queried in order to "associate an AS with a geographic area" when populating the former database. Nothing stored in any of the databases of *Leinwand* is the same or equivalent to a plurality of variations of each of a plurality of geographic names (e.g., "SanFrancisco, SanFran, and Sfrancisco all for San Francisco, California[.]") (Applicant's Specification, page 18, lines 10-11)).

In particular, as noted above, the former database includes only an AS number and the corresponding country codes, neither of which is the same or equivalent to "a plurality of variations of each of a plurality of geographic names." With regard to the ARIN maintained database, according to *Leinwand*, this database is queried "to obtain the registration record for the AS number of the AS ... that is currently of interest ... [wherein] the first few lines of the registration record are scanned for address information for the AS[.]" (*Leinwand*, Col. 15, lines 36-48). According to *Leinwand*, this address information could include a country name or a country code (*Id.* at Col. 15, lines 48-53), neither of which is the same or equivalent to "a plurality of variations of each of a plurality of geographic names."

Similarly, *Leinwand* discloses querying the database maintained by RIPE to obtain "the RIPE aut-num object for the AS number of the AS ... that is of interest ...[wherein] the final descriptive text line of the record is found and parsed to find the country name or country code of

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the AS[.]” (*Id.* at Col. 16, lines 13-21). Like the ARIN database, nothing in the RIPE database is the same or equivalent to “a plurality of variations of each of a plurality of geographic names.”

Accordingly, *Leinwand* does not teach or suggest “comparing at least a part of the extracted geographic naming information for the first intermediate routing device to one or more of the plurality of variations of each of a plurality of geographic names stored in a database containing geographic naming information[,]” as recited by Applicant’s independent Claim 57, as amended. Finally, therefore, *Leinwand* cannot teach or suggest “determining a geographic location of the first intermediate routing device based at least in part on the comparison,” as further recited in Applicant’s independent Claim 57.

*Campion* likewise fails to teach or suggest the above-recitations of Applicant’s independent Claim 57, as amended. With regard to the first step of “extracting ...,” *Campion* discloses *assigning* a host name based on geographic information. (*Campion*, Col. 7, lines 28-32). *Campion* does not teach or suggest *extracting* the geographic naming information from the host name. With regard to the other steps (i.e., “comparing ..” and “determining...”), the Office Action does not even argue that *Campion* teaches or suggests these recitations.

Because neither of the references alone teach, suggest or render obvious “extracting geographic naming information for the first intermediate routing device, from a first part of a host name associated with the first intermediate routing device; comparing at least a part of the extracted geographic naming information for the first intermediate routing device to one or more of the plurality of variations of each of a plurality of geographic names stored in a database containing geographic naming information; ... [or] determining a geographic location of the first intermediate routing device based at least in part on the comparison,” even if combined, the references cannot teach, suggest or render obvious deriving a geographic location for a first intermediate routing device by performing these recitations of Applicant’s independent Claim 57, as amended.

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Based on the foregoing, Applicant respectfully asserts that independent Claim 57 is patentable over *Leinwand* in view of *Campion* and respectfully requests that the rejection of Claim 57 under 35 U.S.C. § 103(a) be withdrawn.

**ii. Dependent Claims 58-67**

Claims 58-67 depend from independent Claim 57 and include all of the recitations of Claim 57 and any intervening claims plus their additional recitations that further distinguish the art applied in the rejection. Thus, for at least the reasons set forth above with respect to independent Claim 57, it is respectfully submitted that dependent Claims 58-67 are further patentable over *Leinwand* in view of *Campion* as such dependent claims now depend from an allowable base claim.

Applicant further submits that neither *Rochberger* nor *Ansell* make up for the deficiencies of *Leinwand* and *Campion*. In particular, neither *Rochberger* nor *Ansell* teach, suggest or make obvious deriving a geographic location of a first intermediate routing device by “extracting geographic naming information for the first intermediate routing device, from a first part of a host name associated with the first intermediate routing device; comparing at least a part of the extracted geographic naming information for the first intermediate routing device to one or more of the plurality of variations of each of a plurality of geographic names stored in a database containing geographic naming information; and determining a geographic location of the first intermediate routing device based at least in part on the comparison,” as recited in Applicant’s independent Claim 57, as amended.

In contrast, according to *Ansell*, a geopolitical territory can be determined by “pars[ing] the *last field of the domain name*.” (*Ansell*, col. 8, lines 43-44). In particular, according to *Ansell*,

In step 404 (FIG. 4), resolver 106 (FIG. 1) parses the *last field* of the domain name. Domain names generally have a number of textual fields delimited by periods, commonly referred to as “dot.” For example, the domain name for the World Wide Web server for the United States Patent and Trademark Office is “www.uspto.gov” in which three fields are “www,” “uspto,” and “gov.” The fields typically have a hierarchy such that each field

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is a subclassification of a domain name which follows. For example, “www.uspto.gov” is a subclassification of “uspto.gov.” Accordingly, the *last field* of a domain name specifies a superclassification which can designate a geopolitical territory.

In test step 406 (FIG. 4), resolver 106 (FIG. 1) determines whether the *last field* of the domain name specifies a geopolitical territory. Many domain names include as the *last field* a two-letter country identifier. For example, “.us” specifies the United States, “.ca” specifies Canada, “.jp” specifies Japan, etc.

(*Id.* at col. 8, lines 43-57, *emphasis added*). As clearly shown above, *Ansell* discloses use of the *last field* of a domain name to identify a geopolitical territory. *Ansell* does not teach or suggest “extracting geographic naming information … from a *first part* of a host name,” as recited in Applicant’s independent Claim 57, as amended. (Independent Claim 57, *emphasis added*).

*Rochberger* likewise fails to teach or suggest the above recitations of Applicant’s independent Claim 57. In fact, the Office Action relies of *Rochberger* for very different purposes. In particular, the Office Actions relies on *Rochberger* as teaching “the use of selecting a route based on having the most available bandwidth and selecting the amount of bandwidth available at the destination[.]” (Office Action, page 7).

Based on the foregoing, Applicant respectfully asserts that dependent Claims 61, 64, 65 and 67 are patentable over *Leinwand* in view of both *Rochberger* and *Ansell* and respectfully requests that the rejection of these claims under 35 U.S.C. § 103(a) be withdrawn.

#### **IV. Conclusion**

In light of the remarks above, Applicant respectfully submits that the application is in condition for allowance and respectfully requests that a Notice of Allowance be issued. The Examiner is encouraged to contact Applicant’s undersigned attorney to resolve any remaining issues in order to expedite examination of the present application.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required

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therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 14-0629.

Respectfully submitted,

/David A. Cornett/

David A. Cornett  
Registration No. 48,417

Ballard Spahr Andrews & Ingersoll, LLP  
Customer Number 23859  
(678) 420-9300  
(678) 420-9301 (fax)